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A) COMMENTS ON PUBLISHED ARTICLES

Commentary on Treatment of HCV infection in chronic kidney disease

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To the Editor,

I read with interest the published article by Aoufi Rabih1 in your journal recently. The prevalence of Hepatitis C virus (HCV) infection in hemodialysis (HD) patients varies markedly from country to country². The main risk factors for HCV infection in this special group are blood transfusions, length of dialysis time and nosocomial routes of transmission including the use of contaminated equipment and patient-topatient exposure3-6. Control of HCV infection in hemodialysis setting is possible^{7,8}. Integration of surveillance system for early detection, treating all of treatable patients with alpha interferon, putting HCV-infected patients on the top list for renal transplantation, training the staffs in hemodialysis patients and using more the erythropoietin instead blood transfusion. The prevalence of HCV infection may be underestimated according to an antibody assay alone9. First of all, i would like to present a dilemma regarding liver biopsy in hemodialysis patients with HCV infection. Liver biopsy in hemodialysis patients is with higher risk of bleeding and other complication and it should do by Trans-jugular or in very specialized center. In treatment of HCV infection in hemodialysis patients, we are not sure regarding superiority of pegylated interferon (IFN) on conventional IFN10,11 and in a metaanalysis The pooled sustained virologic response (SVR) for standard and pegylated IFN monotherapy in random effects model was 39.1% (95% confidence interval [CI], 32.1 to 46.1) and 39.3% (95% CI, 26.5 to 52.1), respectively¹⁰. The difference was not significant, but it is important to treat the patients before 40 years old and as soon as possible^{10,12}. Individuals on dialysis with chronic hepatitis C who were treated with interferon or pegylated interferon plus ribavirin can have higher SVR rate than dialysis patients treated with interferon or pegylated interferon alone. Administration of ribavirin with close monitoring of CBC and serum ribavirin concentration can be safe¹³.

- Aoufi Rabih S, García Agudo R. Treatment of HCV infection in chronic kidney disease. Nefrologia 2011;31(3):260-7.
- Alavian SM, Tabatabaei SH, Mahboobi N. Epidemiology and risk factors of HCV infection among hemodialysis patients in countries of the Eastern Mediterranean Regional Office of WHO (EMRO): a quantitative review of literature. J Public Health (Oxf) 2011;19:191-203.
- Alavian SM. A shield against a monster: Hepatitis C in hemodialysis patients. World J Gastroenterol 2009;15(6):641-6.
- Alavian SM, Kabir A, Ahmadi AB, Lankarani KB, Shahbabaie MA, Ahmadzad-Asl M. Hepatitis C infection in hemodialysis patients in Iran: A systematic review. Hemodial Int 2010;14(3):253-62.
- Mansour-Ghanaei F, Sadeghi A, Mashhour MY, Joukar F, Besharati S, Roshan ZA, et al. Prevalence of hepatitis B and C infection in hemodialysis patients of Rasht (Center of Guilan Province, Northern Part of Iran). Hepat Mon 2009;9(1):45-9.
- Alavian SM, Einollahi B, Hajarizadeh B, Bakhtiari S, Nafar M, Ahrabi S. Prevalence of hepatitis C virus infection and related risk factors among Iranian haemodialysis patients. Nephrology (Carlton) 2003;8(5):256-60.
- Alavian SM. Hepatitis C, chronic renal failure, control is possible! Hepat Mon 2006;6(2):51-2.
- Nemati E, Taheri S, Einollahi B. Hepatitis C among hemodialysis patients: impact of strict adherence to universal precautions. Hepat Mon 2007;7(4):245-6.
- Einollahi B, Alavian SM. Hepatitis C virus infection and kidney transplantation: a review for clinicians. Iran J Kidney Dis 2010;4(1):1-8.
- 10. Alavian SM, Tabatabaei SV. Meta-analysis of

factors associated with sustained viral response in patients on hemodialysis treated with standard or pegylated interferon for hepatitis C infection. Iran J Kidney Dis 2010;4(3):181-94.

- Hosseini Moghaddam SM, Alavian SM, Rahnavardi M. Therapeutic aspects of hepatitis C in hemodialysis patients. Am J Nephrol 2009;29(2):123-8.
- Alavian SM, Hosseini-Moghaddam SM, Rahnavardi M. Hepatitis C among hemodialysis patients: a review on epidemiologic, diagnostic, and therapeutic features. Hepat Mon 2007;7(3):153-62.
- Alavian SM, Tabatabaee V, Lankarani KB. Ribavirin combination therapy of chronic hepatitis C patients with end stage renal disease: review of evidences on efficacy and safety. Int J Nephrol Urol 2011;3(1):1-7.

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Response to the comment made on Treatment of HCV infection in chronic kidney disease

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To the Editor,

Haemodialysis units' health policies and protocols are disparate meaning that prevalence of chronic hepatitis C infection is extremely variable in the haemodialysis population.¹⁻³ In some countries classic infection factors, such as material contaminated due to reuse or blood transfusions, have been

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replaced by parenteral drug addiction or sexual transmission.^{4,5} It is not surprising that prevention is the most adequate and cost-effective control measure for these patients.

Treating chronic HCV before kidney transplantation is currently not an essential criteria for including HCVpositive patients on the transplant waiting list. However, risk of posttransplant chronic hepatitis C and the difficulty to treat it at this stage of the chronic kidney disease have been reported.⁶⁻¹¹

Pegylated interferon and interferon + ribavirin are better than conventional interferon, according to clinical trials. However, the differences are small. Combining ribavirin and pegylated interferon requires close follow-up during haemodialysis given the severity of the secondary effects. It has increased the sustained viral response, although it is still less in the population without chronic kidney disease.12 This, along with the difficulty of treating patients with stages 4 and 5 chronic kidney disease in predialysis, highlights the importance of resolving the infection at early kidney disease stages.

Transjugular liver biopsy reduces the risks of bleeding associated with this procedure and the kidney patient, although there is little evidence in the literature.^{13,14} This technique also allows the hepatic venous pressure gradient to be measured, providing diagnostic and prognostic data.

Studies that determine whether the association of protease inhibitors (telaprevir, boceprevir) with interferon and ribavirin is safe for kidney patients and may increase viral response rates.

- Aoufi Rabih S, García Agudo R. Manejo de la infección por el VHC en la enfermedad renal crónica. Nefrologia 2011;31(3):260-7.
- Fissell RB, Bragg-Gresaham JL, Woods JD, Jadoul M, Gillespie B, Hedderwick SA, et al. Patterns of hepatitis C prevalence and seroconversion in hemodialysis units from three continents: the DOPPS. Kidney Int

2004;65(6):2335-42.

- Sivapalasingam S, Malak SF, Sullivan JF, Lorch J, Sepkowitz KA. High prevalence of hepatitis C infection among patients receiving hemodialysis at an urban dialysis center. Infect Control Hosp Epidemiol 2002; 23(6):319-24.
- Hinrichsen H, Leimenstoll G, Stegen G, Schrader H, Fölsch UR, Schmidt WE; PHV Study Group. Prevalence and risk factors of hepatitis C virus infection in haemodialysis patients: a multicentre study in 2796 patients. Gut 2002;51(3):429-33.
- Huraib S, Al-Rashed R, Aldrees A, Aljefry M, Arif M, Al-Faleh FA. High prevalence of and risk factors for hepatitis C in haemodialysis patients in Saudi Arabia: a need for new dialysis strategies. Nephrol Dial Transplant 1995;10(4):470-4.
- Hanafusa T, Ichikawa Y, Kishikawa H, Kyo M, Fukunishi T, Kokado Y, et al. Retrospective study on the impact of hepatitis C virus infection on kidney transplant patients over 20 years. Transplantation 1998;66(4):471-6.
- Bruchfeld A, Wilczek H, Elinder CG. Hepatitis C infection, time in renal replacement therapy, and outcome after kidney transplantation. Transplantation 2004;78(5):745-50.
- Gentil MA, Rocha JL, Rodríguez-Algarra G, Pereira P, López R, Bernal G, et al. Impaired kidney transplant survival in patients with antibodies to hepatitis C virus. Nephrol Dial Transplant 1999;14(10):2455-60.
- Gheith OA, Saad MA, Hassan AA, A-Eldeeb S, Agroudy AE, Esaza H, et al. Hepatic dysfunction in kidney transplant recipients: prevalence and impact on graft and patient survival. Clin Exp Nephrol 2007;11(4):309-15.
- Kamar N, Ribes D, Izopet J, Rostaing L. Treatment of hepatitis C virus infection (HCV) after renal transplantation: implications for HCV positive dialysis patients awaiting a kidney transplant. Transplantation 2006;82(7):853-6.
- Toth CM, Pascual M, Chung RT, Graeme-Cook F, Dienstag JL, Bhan AK, et al. Hepatitis C virus-associated fibrosing cholestatic hepatitis after renal transplantation: response to interferon-alpha therapy. Transplantation 1998;66(9):1254-8.
- Fabrizi F, Dixit V, Martin P, Messa P. Combined antiviral therapy of hepatitis C virus in dialysis patients: meta-analysis of clinical trials. J Viral Hepat 2010. doi:

10.1111/j.1365-2893.2010.01405.x. [Epub ahead of print]

- De Paula Farra K, Carmo RA, De Figueiredo Antunes CM, Serufo JC, Nobre Júnior VA. Hepatitis C, HCV genotypes and hepatic siderosis in patients with chronic renal failure on haemodialysis in Brazil. Nephrol Dial Transplant 2007;22:2027-31.
- 14. García Agudo R, Aoufi Rabih S, Pérez Roldán F, Guzmán Ames F, González Carro P, Ruiz Carrillo F, Cuesta Domínguez R. El gradiente de presión venoso hepático y la biopsia hepática transyugular en la evaluación de los pacientes con insuficiencia renal y hepatopatía crónica. Nefrologia 2011; 31(4):490-2.

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Cyclophosphamideinduced lupus flare?: the role of C4 and interferon-gamma in lupus flare

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To the Editor,

We read with great interest the contribution by Heras, et al.¹. They reported a significant case that seemed not to respond to intravenous (IV) cyclophosphamide (CPM) induction treatment at 1 g but to respond to increased CPM dose to 1.5 g. Reading the case report, we wondered whether CPM certainly induced the lupus flare or other mechanisms were involved in the pathogenesis. They speculated